optiPoint 410 S
optiPoint 420 S

The complete IP telephone family for SIP

Ranging from the optiPoint 410 entry S for basic Voice over IP to the optiPoint 410 advance S with optiPoint display module for the most demanding telephone users, the right SIP telephone is available for every situation. Fast access to all features via programmable function keys that can easily be labeled individually thanks to the innovative self-labeling key technology of the optiPoint 420 S family. optiPoint adapters and modules allow for complete customization of your workplace requirements. optiPoint SIP phones have been optimized for the use of features of the Siemens HiPath 8000 communication system and other SIP-based standard platforms for Siemens communication solutions in the enterprise and carrier market.

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optiPoint 410 S / 420 S - an overview

The optiPoint 410 S telephone family brings you flexible IP telephones with maximum customization capability. A standard user interface and the reliable integration in various SIP-based network solutions make for easy, user-friendly and reliable telephony. Features include not only the usual functions, such as call forwarding, call deflection and conferencing, but also such convenience functions as address books, call journals and voice dialing (access via optiPoint display module). In addition to a wide variety of models in the family, the modular expansion options of optiPoint 410 S telephones allow for particularly attractive solutions in terms of price - you only pay for what you actually need. And operating costs are reduced: plug & play functionality minimizes the time required for installation and consequently reduces costs. This is an investment that also brings long-term benefits for service and maintenance. Upgrading to new features is easy - just download the software - your investment is secure from the outset.

optiPoint 420 S – tomorrow's office flexibility today

Fast and more secure access to all features – thanks to the user-programmable function keys on the optiPoint telephones and the optiPoint key module. Regardless of whether users configure them themselves to suit their individual requirements - or they are programmed centrally for consistent user guidance – the optiPoint 420 S devices from Siemens are the perfect solution. All the tedious work of writing out the names on paper strips, cutting them out and inserting them has been completely eliminated. Thanks to new, innovative technology for electronic display of key assignments, feature keys are always up to date. Of course you can also customize key assignment to suit your own needs, defining exactly those functions and text labels that you require.

Telephones

optiPoint 410 entry S

The optiPoint 410 entry S is a cost-effective introduction to IP telephony. The telephone is recommended wherever there are minimum requirements with regard to features and convenience (e.g. logistics facilities, corridors, reception rooms, small hotels, hospitals). However, these devices still bring everything that is to be expected of an IP telephone in terms of simple installation and cost-effective operation, such as plug & play support using the Deployment Service and DHCP, as well as support of QoS mechanisms and an extensive codec selection.

Features
- 8 programmable function keys with LED indicator
- 2 control keys
- Codecs: G.711/723/729/722
- Open listening
- Power over LAN to IEEE802.3af
- Wall-mountable

optiPoint 410 economy S
optiPoint 420 economy S

Equipped with a two-line display and three dialog keys, the optiPoint 410/420 economy S models enable you to control the provided features such as call forwarding, hold, consultation hold or call waiting. The telephone number and name of the caller can also be displayed, of course, making this model eminently suitable for business communication in offices, sales outlets or hotels.

Features
- 2-line alphanumeric display (24 characters each), tiltable
- 12 programmable function keys with LED indicator
- 2 control keys, 3 dialog keys for user prompts
- Extensive telephony- features
- Codecs: G.711/723/729/722
- Open listening
- Power over LAN to IEEE802.3af
- Wall-mountable

optiPoint 410 /420 economy plus S

These telephones offer two additional features compared with the optiPoint 410/420 economy, making them ideal for use in offices or call centers:
- 10/100 Mbps mini-switch
- 1 port for headset (121TR9-5/Polaris)

optiPoint 410 standard S
optiPoint 420 standard S

These telephones meet all the requirements of a modern office workstation and provide the demanding user with other important functions such as a full-duplex hands-free speakerphone, the option to use additional function key modules, and the possibility of accessing optiPoint display module applications.

Features

- 2-line alphanumeric display (24 characters each), backlit, tiltable

- 12 programmable function keys with LED indicator

- 2 control keys, 3 dialog keys for user prompts

- Extensive telephony features

- Codecs: G.711/723/729/722

- Hands-free speakerphone (full duplex)

- 2 adapter slots and interface for up to 2 add-on devices

- 10/100 Mbps mini-switch

- 1 port for headset (121TR9-5/Polaris)

- Power over LAN to IEEE802.3af

- Wall-mountable

optiPoint 410 advance S
optiPoint 420 advance S

This telephone has a four-line display and, in conjunction with the optiPoint display module, is particularly suitable for use in prestigious environments such as management offices, conference rooms and superior hotel rooms.

Features

- 4-line alphanumeric display (24 characters each), backlit, tiltable

- 19 and/or 18 programmable function keys with LED indicator

- 2 control keys, 3 dialog keys for user prompts

- Extensive telephony features-

- Codecs: G.711/723/729/722

- Hands-free speakerphone (full duplex)

- 1 adapter slot and interface for up to 2 add-on devices

- 10/100 Mbps mini-switch

- 1 port for headset (121TR9-5/Polaris)

- USB master port

- Power over LAN to IEEE802.3af

- Wall-mountable

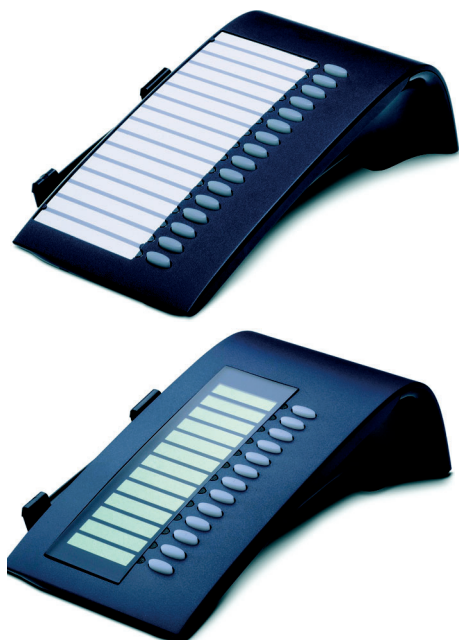# Accessories

optiPoint display module

The optiPoint display module is the ideal enhancement to the optiPoint 410/420 standard S and optiPoint 410/420 advance S. The large display with touchscreen functionality makes it easy to access information, input data and control functions. The graphical user interface provides applications for controlling telephony and managing journals, plus a local address book.
In addition, the optiPoint display module makes it possible to implement other user-specific applications in a Java® based standard programming environment and to download them to the telephone. A Java® software developer kit, which can be downloaded from the Siemens website, is available for this (free of charge).

- Large graphic touchscreen display, backlit, tiltable, with 240 x 320 pixels

- 5 navigation keys

- 1 voice dial key

- 1 menu key

- Virtual keyboard

Adapters and add-on devices

The optiPoint family's innovative adapter and add-on device concept makes it possible to react to changing workplace requirements without replacing the endpoint. Frequent conference requirements, for example, can be met by using the optiPoint acoustic adapter, with an external microphone and loudspeaker. Additional function keys are also supported on the optiPoint 410/420 standard S and optiPoint 410/420 advance S, up to two add-on modules can be connected.

Applications

The following applications are currently available on the optiPoint display module:

● **Call Control**
As an alternative to the 2/4-line display on the telephone, this application provides a graphical representation of the active calls, including telephone numbers and names. Functions such as hold or conference call are thus presented intuitively and can be controlled simply by touching the touchscreen.

● **Contacts**
The local address book holds up to 640 entries. The address data can be downloaded from the PC as comma separated files. Menu prompts guide the user through the update process.

● **Address book**
A central address database can be accessed via the LDAP interface. This means that corporate telephone numbers do not have to be updated locally.

● **Missed calls list**
This application provides a quick and simple overview of all call types: The last 20 entries for missed, dialed, received and forwarded calls are available together with the name, telephone number, date/time and number of events - at the touch of a button. These can be incorporated in the local list of contacts or deleted.

● **Browser**
The integrated WAP browser offers quick access to online data from the intranet and Internet.

● **Voice dialing**
Voice dialing can be called up directly via the voice dial key. Up to 20 entries in the contact application can be stored with a voice recording.

● **Online help**
Online help can be called up via the WAP browser. The online help for this purpose is stored at a single central location in the company network.

Technical data

Supported standards and target system

In addition to the RFC3261, the telephones comply with a whole range of SIP and IP standards. For further details, please contact your local sales representative.
In addition to the standard IETF-based features, these telephones also support features for use with the Siemens Real Time System HiPath 8000.

Overview of Features V5.0

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Hardware					
Display	No	2 lines (2 x 24 characters)	2 lines (2 x 24 characters)	2 lines, backlit (2 x 24 characters)	4 lines, backlit (4 x 24 characters)
Feature keys, programmable and with adjacent LEDs					
optiPoint 410 S	8 keys	12 keys	12 keys	12 keys	19 keys
optiPoint 420 S	–	12 keys with self-labeling function	12 keys with self-labeling function	12 keys with self-labeling function	18 keys with self-labeling function
Dialog keys	–	3	3	3	3
Volume setting adjustment keys (plus, minus)	Yes	Yes	Yes	Yes	Yes
Wall-mountable (without sidecar and optional bay support)	Yes	Yes	Yes	Yes	Yes
Dimensions (height * width * length [mm])					
optiPoint 410 S	64 x 160 x 220	69 x 215 x 220	69 x 215 x 220	69 x 215 x 220	72 x 215 x 220
optiPoint 420 S	–	79 x 225 x 220	79 x 225 x 220	79 x 225 x 220	82 x 225 x 220
Weight (kg)					
optiPoint 410 S	0.606	0.813	0.813	0.837	0.862
optiPoint 420 S	–	0.866	0.873	0.899	0.916
Colors: arctic and manganese					
Storage conditions	DIN IEC 721-3-3/ DIN EN 60721-3-3 and ETS 300 019-2-3				
Operating conditions	DIN IEC 721-3-1 and -3-2/ DIN EN 60721-3-1 and -3-2 and ETS 300 019-2-1				
Certification					
CE Mark	Yes				
Underwriters Laboratories (UL)	Yes				
Canadian Standards Association (CSA)	Yes				
Federal Communications Commission (FCC) Part 68 (CFR 47)	Yes				
Federal Communications Commission (FCC) Part 15 (CFR 47) Class B	Yes				
Electro-Magnetic Compatibility (EMC) (EN 55022)	Yes				
User electrical security EN 60 950	Yes				
EC TBR 8	Yes				
Acoustic Features and Audio Support					
G.711 (64 kbit/s a/μ law)	Yes	Yes	Yes	Yes	Yes
G.722 (64 kbit/s), wide band co-dec	Yes	Yes	Yes	Yes	Yes
G.723.1A (5.3/6.3 kbit/s)	Yes	Yes	Yes	Yes	Yes
G.729 A/B (8 kit/s)	Yes	Yes	Yes	Yes	Yes
Open listening	Yes	Yes	Yes	Yes	Yes
Full duplex hands-free	No	No	No	Yes	Yes
G.711, G.729A/B [new] Silence suppression (VAD)	Yes	Yes	Yes	Yes	Yes
Ringer Off	Yes	Yes	Yes	Yes	Yes
Echo canceling for local echo (AEC) full duplex	No	No	No	Yes	Yes
Configurable Jitter Buffer	Yes	Yes	Yes	Yes	Yes
Room Character Configuration	No	No	No	Yes	Yes

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Selectable Packet Size (10ms/20ms)	Yes	Yes	Yes	Yes	Yes
DTMF (in-band)	Yes	Yes	Yes	Yes	Yes
DTMF (RFC2833)	Yes	Yes	Yes	Yes	Yes
Network					
DHCP (IP address, subnet mask, DLS address, FTP address, option 120)	Yes	Yes	Yes	Yes	Yes
DNS names for phones	Yes	Yes	Yes	Yes	Yes
IEEE802.1p/q (VLAN tagging and prioritization) VLAN ID, manually or DHCP option 43	Yes	Yes	Yes	Yes	Yes
QoS (DIFFSERV and IEEE802.1p/q)	Yes	Yes	Yes	Yes	Yes
10/100 Base-T interface, auto sensing	Yes	Yes	Yes	Yes	Yes
10/100 Base-T mini switch, auto sensing to connect PC	No	No	Yes	Yes	Yes
RJ45 jacks	1	1	2 (phone/PC)	2 (phone/PC)	2 (phone/PC)
Headset port 121 TR9-5/Polaris	No	No	Yes	Yes	Yes
USB master port	No	No	No	No	Yes
SNMP (MIB II support)	Yes	Yes	Yes	Yes	Yes
Support of QDC	Yes	Yes	Yes	Yes	Yes
Failover / Redundancy					
DNS SRV	Yes	Yes	Yes	Yes	Yes
Registration with backup proxy	Yes	Yes	Yes	Yes	Yes
NAT	Via Application Layer Gateways				
Power supply					
External power supply unit (EU, US or UK variants)	Yes	Yes	Yes	Yes	Yes
Power over LAN: IEEE 802.3af	Yes	Yes	Yes	Yes	Yes
Power over LAN according to Cisco (no CDP)	Yes	Yes	Yes	Yes	Yes
PoL class	Class 0 (0.44 W – 12.95 W)	Class 1 (0.44 W – 3.84 W)	Class 1 (0.44 W – 3.84 W)	Class 2 (3.84 W - 6.49 W)	Class 2 (3.84 W - 6.49 W)
Modularity (Module / Adapter Support)					
option bays (for adapter plug-in)	No	No	No	Yes (2 bays)	Yes (1 bay)
Acoustic adapter	No	No	No	Yes	Yes
Recorder adapter	No	No	No	Yes	Yes
optiPoint display module	No	No	No	Yes	Yes
Busy Lamp Field	No	No	No	No	No
Support of optiPoint key module, max. two modules per phone	No	No	No	Yes, 410 S	Yes, 410 S
Support of optiPoint self-labeling key module, max. two modules **Note:** No mixed configuration supported.	No	No	No	Yes	Yes
optiPoint application module	No	No	No	No	No

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Applications on optiPoint display module					
Call log - last 20 calls in categories: dialed, missed, forwarded, received				Yes	Yes
Contacts (640 entries)				Yes	Yes
Directory access via LDAP				Yes	Yes
Speed dial				Yes	Yes
Voice dialing				Yes	Yes
Telephony (call control) application				Yes	Yes
Service application				Yes	Yes
WAP browser				Yes	Yes
Java SDK				Yes	Yes
Administration					
Remote administration via DLS (using HTTP/S)	Yes	Yes	Yes	Yes	Yes
Administration via local interface (password-protected)	Yes	Yes	Yes	Yes	Yes
Remote administration via Web interface for user and administration configuration items (using HTTP/S, password-protected)	Yes	Yes	Yes	Yes	Yes
Feature enable/disable via administration (password-protected)	Yes	Yes	Yes	Yes	Yes
Plug&Play-Registration ● Assignment using the MAC address ● Assignment using E.164 [new]	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
Common Telephony Features					
Distinctive Ringing	No	Yes	Yes	Yes	Yes
Call Hold	No	Yes	Yes	Yes	Yes
Consultation	No	Yes	Yes	Yes	Yes
Alternate	No	Yes	Yes	Yes	Yes
Call Deflection	No	Yes	Yes	Yes	Yes
Call Waiting	No	Yes	Yes	Yes	Yes
Call Decline/Refuse	No	Yes	Yes	Yes	Yes
Call Forward (unconditional, no reply, busy)	No	Yes	Yes	Yes	Yes
Call Transfer (unattended – blind transfer, attended - join)	No	Yes	Yes	Yes	Yes
Call Transfer Unscreened (Transfer on Ring) [new]	No	Yes	Yes	Yes	Yes
Local 3-way conference	No	No	Yes	Yes	Yes
Mute	Yes	Yes	Yes	Yes	Yes
Music on hold (endpoint generated music)	No	Yes	Yes	Yes	Yes
Call log 2/4 line display - last 20 calls in categories: dialed, missed, forwarded, received	No	Yes	Yes	Yes	Yes
Repeat Dial (20 entries)	No	Yes	Yes	Yes	Yes
Abbreviate Dialing (12 destinations)	Yes	Yes	Yes	Yes	Yes
On-Hook Dialing	Yes	Yes	Yes	Yes	Yes
Name/URL Dialing	No	Yes	Yes	Yes	Yes

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Emergency Calling	Yes	Yes	Yes	Yes	Yes
Direct Mode / IP Dialing	No	No	No	No	No
Hotline / Warmline	Yes	Yes	Yes	Yes	Yes
Message Waiting Indication (Message Waiting displayed in idle menu)	No	Yes	Yes	Yes	Yes
Phone Lock: ● Forwarding of calls when phone is locked (phone-lock forward) ● Use of "emergency" numbers when locked	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes
Auto Dialing, after 6 seconds (configurable)	Yes	Yes	Yes	Yes	Yes
Repertory Dialing	No	Yes	Yes	Yes	Yes
"On-Hook" – to bring the phone in idle state	Yes	Yes	Yes	Yes	Yes
"Off-Hook" – to bring the phone out of setup and enable dialing [new]	No	Yes	Yes	Yes	Yes
Hot keypad dialing	Yes	Yes	Yes	Yes	Yes
Enabling / disabling dialing type (Name, Number) [new]	Yes	Yes	Yes	Yes	Yes
Initial digit timeout after going "off-hook" [new]	Yes	Yes	Yes	Yes	Yes
Idle display enhancement: to scroll through the messages via +/- keys [new]	No	Yes	Yes	Yes	Yes
Flashing or static idle display messages [new]	No	Yes	Yes	Yes	Yes
Local dial plan	Yes	Yes	Yes	Yes	Yes
Language support English (US), German, French, Italian, Spanish, Portuguese, Dutch	No	Yes	Yes	Yes	Yes
Country support: Austria, Belgium, France, Germany, Italy, Spain, Switzerland, US, United Kingdom	Yes	Yes	Yes	Yes	Yes
Telephony Features for HiPath 8000					
Multiple Line Appearances and Associated Features					
Line Reservation [new]	Yes	Yes	Yes	Yes	Yes
Audible Ringing on Rollover Lines: ● Beep ● Alert Ringing ● No Ringing ● Standard Ringing [new] **Note:** Capability to play a Standard Ringing tone while the user is active on the telephone)	Yes	Yes	Yes	Yes	Yes
Outgoing Line Preferences: ● Idle ● Primary ● Last [new] ● No Line (user must press the line to use – not automatic) [new]	Yes	Yes	Yes	Yes	Yes

	410 entry S	410/420 economy S	410/420 economy plus S	410/420 standard S	410/420 advance S
Terminating Line Preferences: ● Ringing Line ● Ringing Prime Line Preferred [new] ● Incoming Line ● Incoming Prime Line Preferred [new] ● None (a line key must be pressed to answer a call) [new]	Yes	Yes	Yes	Yes	Yes
Indication of Unconditional Call Forwarding [new]	Yes	Yes	Yes	Yes	Yes
Line Key Action Mode Hold or Release [new]	Yes	Yes	Yes	Yes	Yes
Hotline/Warmline Working [new]	Yes	Yes	Yes	Yes	Yes
Number of lines with Multiple Line Appearances	6	6	10	10	10
Direct Station Selection (DSS)	No	Yes (5 keys)	Yes (9 keys)	Yes (9 keys)	Yes (9 keys)
Further Features for HiPath 8000					
Hot Desking Feature Key [new]	No	Yes	Yes	Yes	Yes
Automatic Call Back on Busy between HiPath 8000 end points [new] **Note:** Implemented via use of feature codes – it is not a SIP service)	No	Yes	Yes	Yes	Yes
Automatic Call Back on no Reply [new]: ● Phone ● HiPath 8000 Server **Notes:** ● Feature not yet supported by server ● Implemented via use of feature codes – it is not a SIP service)	No No	Yes No	Yes No	Yes No	Yes No
Group Call Pickup (HiPath 8000)	No	Yes	Yes	Yes	Yes
Feature key toggle (HiPath 8000)	No	Yes	Yes	Yes	Yes
3PCC (third-party call control)	Yes	Yes	Yes	Yes	Yes
Calling/called/connected party display	No	Yes	Yes	Yes	Yes
Security					
SIP over TLS connection	Yes	Yes	Yes	Yes	Yes
TLS on Web Server I/F (i.e. HTTP/S)	Yes	Yes	Yes	Yes	Yes
Default Phone Certificate Provided	Yes	Yes	Yes	Yes	Yes
Support of digital certificates (X.509 V3)	Yes	Yes	Yes	Yes	Yes
Secure protocols for administration and management **Note:** not LDAP/s, secure FTP, SNMP V3	Yes	Yes	Yes	Yes	Yes
Mutual authentication of the TLS interface to the DLS	Yes	Yes	Yes	Yes	Yes

Our strengths - Your advantages

Siemens is known worldwide as a trailblazer in the advancement of information and communication technologies. No other company offers such a comprehensive and innovative portfolio.

Regardless of which communication technology you are using today – or want to use tomorrow – Siemens offers you the right solution.

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